RESTRICTED CIRCULATION

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Agricultural Memorandum No. 711

Estimated Actual Soil Moisture Deficits, 1941-70, SOUTH-EAST

L P Smith

Following the lines of Ag Mems 707-708 and using the same notation the following multiple regressions were found:-

	L.Q.	Median	H.Q.
End of June	0.91	0.97	0.90
End of July	0.90	0.81	0.89
End of August	0.92	0.82	0.92
End of September	0.80	0.87	0.74

The formulae were:-

	L.Q.	Median	H.Q.
End of June	$0.42P_3-0.028R_3+2.39$	$0.80P_3-0.016R_3-1.88$	$0.49P_3-0.0085R_3+0.5$
End of July	$0.1P_4-0.03R_4+7.61$	$0.24P_4-0.013R_4+3.33$	$0.29P_4-0.007R_4+2.03$
End of August	$0.53P_5-0.026R_5+0.8$	$0.32P_5-0.012R_5+1.88$	$0.29P_5-0.0045R_4+1.2$
End of September	$0.68P_6-0.025R_6-2.47$	$0.32P_6-0.014R_6+2.21$	$0.09P_6-0.008R_6+5.45$

The basic data were as follows:-

SOUTH EAST	June			July			August			September		
	L.Q.	M	H.Q.	L.Q.	M	H.Q.	L.Q.	M	H.Q.	L.Q.	M	H.Q.
Bodiam	2.0	3.0	3.8	2.4	3,4	4.3	2.4	3.4	4.5	0.5	2.8	4.0
Wye	2.6	3.3	3.8	3.2	4.0	4.2	1.9	4.1	4.8	1.0	3.5	4.6
Chichester	2.3	3.1	3.8	2.6	4.1	4.3	2.3	3.9	4.6	0.7	2.6	4.3
Wantage	1.6	2.6	3.4	2.3	3.4	4.0	1.5	3.2	4.3	0.8	2.5	3.8
Rothamsted	1.8	2.8	3.6	2.4	3.6	4.3	1.7	3.8	4.5	0.7	3.5	4.5
Portsmouth	2.6	3.3	3.9	3.3	4.1	4.5	2.9	4.2	4.8	1.8	3.6	4.6
Wealdstone	2.4	3.5	4.1	2.4	4.0	4.5	2.7	4.2	4.9	1.5	3.6	4.6
Croydon	2.4	3.3	4.0	3.0	4.0	4.5	3.2	4.1	4.7	3.1	3.6	4.4
E.Malling	2.6	3.1	3.9	3.4	3.7	4.4	2.9	4.0	4.8	2.5	3.5	4.4
South Farnborough	2.2	3.0	3.9	2.8	4.1	4.3	2.2	4.2	4.7	1.9	3.3	4.6

SOUTH-EAST (Contd)

Reading	2.3	3.1	3.9	2.7	4.0	4.3	2.7	4.1	4.6	1.6	3.4	4.6
Kew	2.2	3.6	4.1	2.7	4.2	4.6	2.9	4.4	5.0	3.0	3.7	4.5
Swanley	2.7	3.5	4.0	3.3	4.0	4.6	3.2	4.4	4.9	3.4	3.9	4.6
Margate	3.3	3.9	4.2	4.1	4.4	4.8	4.1	4.6	5.0	2.8	4.3	5.0

Any comments or suggestions on this paper should be referred to the author.

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